

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed July 13, 2004. In order to advance prosecution of this Application, Claims 1, 4-6, 10, 12, 16, 18, 20, and 31 have been amended and Claims 2, 8, 17, 34, and 39 have been canceled without prejudice or disclaimer. Applicant respectfully requests reconsideration and favorable action for this Application.

Claims 1-40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gupta, et al. Claims 2, 8, 17, 34, and 39 have been canceled without prejudice or disclaimer. Applicant respectfully traverses this rejection.

Independent Claim 1 recites ". . . receiving a plurality of ingress traffic streams, each ingress traffic stream including a plurality of packets having a destination address, wherein the packets are Internet Protocol (IP) packets and each include an IP address; aggregating the ingress traffic streams into a combined traffic stream without regard to the destination addresses; and transmitting the combined traffic stream to a backbone network for routing based on the destination addresses" By contrast, the access node of the Gupta, et al. patent only receives ATM cells from its user nodes and provides ATM cells to its backbone ATM network. The DHCP Server of the Gupta, et al. patent identified by the Examiner is not part of the access node and does not perform aggregation of IP packets. Thus, the access node of the Gupta, et al. patent does not receive ingress traffic streams having IP packets that are aggregated into a combined traffic stream for transmission as IP packets to a backbone network as required by the claimed invention.

Dependent Claim 6 recites ". . . segmenting at the CPE ports the IP packets in the ingress traffic streams into

asynchronous transport mode (ATM) adaption layer (AAL) cells, wherein the ATM cells include a virtual private interface/virtual connection interface (VPI/VCI) ATM address generated from the IP addresses of the IP packets; switching the AAL cells to a network interface port; reassembling the IP packets from the AAL cells at the network interface port; and aggregating the IP packets into the combined traffic stream." By contrast, the access node of the Gupta, et al. patent already receives information in ATM cells from the users. The SAR block of the Gupta, et al. patent identified by the Examiner is in the user node and not in the access node as would be needed to perform the function of the claimed invention. Thus, the access node of the Gupta, et al. patent does not convert IP packets to and from ATM cells as provided in the claimed invention. Moreover, the access node of the Gupta, et al. patent does not generate VPI/VCI addresses for the ATM cells from the IP addresses of the IP packets as required by the claimed invention. In addition, the access node of the Gupta, et al. patent does not perform switching of ATM cells as required by the claimed invention. Further, there is no aggregation of IP packets in the access node of the Gupta, et al. patent as provided in the claimed invention.

Dependent Claim 10 recites ". . . receiving an egress traffic stream from the backbone network, the egress traffic stream including a plurality of IP packets each having an IP address . . . transmitting the IP packets from the CPE ports to their destination CPEs." By contrast, the access node of the Gupta, et al. patent receives only ATM cells from its backbone ATM network and provides only ATM cells to its user nodes. The DHCP Server of the Gupta, et al. patent identified by the Examiner is not part of the access node and does not provide IP packets to CPE destinations. Thus, the Gupta, et

al. patent does not receive an egress traffic stream with IP packets and transmit IP packets to destination CPEs as provided in the claimed invention.

Dependent Claim 12 recites ". . . determining an asynchronous transport mode (ATM) address for each IP packet of the egress traffic stream based on its IP address; segmenting each IP packet into a set of ATM adaption layer (AAL) cells having the ATM address for the IP packet; switching the AAL cells to their respective CPE ports based on the ATM addresses; and reassembling the IP packets from the AAL cells at each CPE port for delivery." By contrast, the access node of the Gupta, et al. patent already receives information in ATM cells from its ATM backbone network. The SAR block of the Gupta, et al. patent identified by the Examiner is in the user node and not in the access node as would be needed to perform the function of the claimed invention. Thus, the access node of the Gupta, et al. patent does not convert IP packets to and from ATM cells as provided in the claimed invention. Moreover, the access node of the Gupta, et al. patent does not generate VPI/VCI addresses for the ATM cells from the IP addresses of the IP packets as required by the claimed invention. In addition, the access node of the Gupta, et al. patent does not perform switching of ATM cells as required by the claimed invention.

Independent Claim 16 recites ". . . means for aggregating a plurality of ingress traffic streams from customer premise equipment (CPE) into a combined traffic stream for transmission to a backbone network; and means for routing egress traffic received from the backbone network to CPEs using a static routing table, wherein the ingress and egress traffic include a plurality of Internet Protocol (IP) packets each having an IP address, the IP address of IP packets in the

egress traffic stream used as an index to the static routing table." By contrast, the access node of the Gupta, et al. patent receives only ATM cells from its user nodes and provides only ATM cells to its backbone network. The DHCP Server of the Gupta, et al. patent identified by the Examiner is not part of the access node and does not perform aggregation of IP packets. Thus, the access node of the Gupta, et al. patent does not receive ingress traffic streams having IP packets that are aggregated into a combined traffic stream as required by the claimed invention.

Dependent Claim 18 recites ". . . means for segmenting incoming IP packets into asynchronous transport mode (ATM) adaption layer (AAL) cells, wherein the AAL cells include a virtual private interface/virtual connection interface (VPI/VCI) ATM address generated from the IP addresses of the IP packets; means for switching the AAL cells within the access network; and means for reassembling the AAL cells into outgoing IP packets." By contrast, the access node of the Gupta, et al. patent already receives information in ATM cells from the users. The SAR block of the Gupta, et al. patent identified by the Examiner is in the user node and not in the access node as would be needed to perform the function of the claimed invention. Thus, the access node of the Gupta, et al. patent does not convert IP packets to and from ATM cells as provided in the claimed invention. Moreover, the access node of the Gupta, et al. patent does not generate VPI/VCI addresses for the ATM cells from the IP addresses of the IP packets as required by the claimed invention. In addition, the access node of the Gupta, et al. patent does not perform switching of ATM cells as required by the claimed invention.

Independent Claim 20 recites ". . . receiving ingress Internet Protocol (IP) packets from customer premise equipment

(CPE), each IP packet having an IP address; receiving egress IP packets from a backbone network for delivery to CPEs; segmenting the ingress IP packets at a CPE interface of an access network into asynchronous transport mode (ATM) adaption layer (AAL) cells, wherein the AAL cells include a virtual private interface/virtual connection interface (VPI/VCI) address generated from the IP addresses of the IP packets; segmenting the egress IP packets at a network interface into AAL cells; and switching the AAL cells across the access network." By contrast, the access node of the Gupta, et al. patent already receives information in ATM cells from the users. The SAR block of the Gupta, et al. patent identified by the Examiner is in the user node and not in the access node as would be needed to perform the function of the claimed invention. Thus, the access node of the Gupta, et al. patent does not convert IP packets to and from ATM cells as provided in the claimed invention. Moreover, the access node of the Gupta, et al. patent does not generate VPI/VCI addresses for the ATM cells from the IP addresses of the IP packets as required by the claimed invention. In addition, the access node of the Gupta, et al. patent does not perform switching of ATM cells as required by the claimed invention.

Independent Claim 26 recites ". . . logic operable to receive a plurality of ingress traffic streams, each ingress traffic stream including a plurality of Internet Protocol (IP) packets having an IP address, aggregate the ingress traffic streams into a combined traffic stream without regard to the IP addresses, and transmit the combined traffic stream to a backbone network for routing based on the IP addresses." By contrast, the access node of the Gupta, et al. patent receives only ATM cells from its user nodes and provides only ATM cells to its backbone ATM network. The DHCP Server of the Gupta, et

al. patent identified by the Examiner is not part of the access node and does not perform aggregation of IP packets. Thus, the access node of the Gupta, et al. patent does not receive ingress traffic streams having IP packets that are aggregated into a combined traffic stream for transmission as IP packets to a backbone network as required by the claimed invention.

Dependent Claim 31 recites ". . . logic further operable to receive the ingress traffic streams at a plurality of customer premise equipment (CPE) ports, segment at the CPE ports the IP packets in the ingress traffic streams into asynchronous transport mode (ATM) adaption layer (AAL) cells, switch the AAL cells to a network interface port, reassemble the IP packets from the AAL cells at the network interface port and aggregate the IP packets into the combined traffic stream, wherein the AAL cells include a virtual private interface/virtual connection interface (VPI/VCI) address generated from the IP addresses of the IP packets." By contrast, the access node of the Gupta, et al. patent already receives information in ATM cells from the users. The SAR block of the Gupta, et al. patent identified by the Examiner is in the user node and not in the access node as would be needed to perform the function of the claimed invention. Thus, the access node of the Gupta, et al. patent does not convert IP packets to and from ATM cells as provided in the claimed invention. Moreover, the access node of the Gupta, et al. patent does not generate VPI/VCI addresses for the ATM cells from the IP addresses of the IP packets as required by the claimed invention. In addition, the access node of the Gupta, et al. patent does not perform switching of ATM cells as required by the claimed invention. Further, there is no

aggregation of IP packets in the access node of the Gupta, et al. patent as provided in the claimed invention.

Dependent Claim 35 recites ". . . logic further operable to receive an egress traffic stream from the backbone network, the egress traffic stream including a plurality of IP packets each having an IP address, determine a customer premise equipment (CPE) port for each IP packet based on its IP address, route the IP packets to their respective CPE ports and transmit the IP packets from the CPE ports to their destination CPEs." By contrast, the access node of the Gupta, et al. patent receives only ATM cells from its backbone ATM network and provides only ATM cells to its user nodes. The DHCP Server of the Gupta, et al. patent identified by the Examiner is not part of the access node and does not provide IP packets to CPE destinations. Thus, the Gupta, et al. patent does not receive an egress traffic stream with IP packets and transmit IP packets to destination CPEs as provided in the claimed invention.

Based on the foregoing, the Gupta, et al. patent is not sufficient to support a rejection of the claims. Therefore, Claims 1, 3-7, 9-30, 32-38, and 40 are patentably distinct from the Gupta, et al. patent.

CONCLUSION

Applicant has now made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other apparent reasons, Applicant respectfully requests allowance of all pending claims.

No additional fee is believed to be due. However, the Commissioner is hereby authorized to charge these fees and any extra fee or credit any overpayments to Deposit Account No. 02-0384 of BAKER BOTTS L.L.P.

Respectfully submitted,
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A handwritten signature in cursive script, appearing to read "Charles S. Fish".

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